NIKOLAY, B.L.

NIKOLAI, B.L. (Odessa)

Calculation of stresses in thin-walled elastic rods of open cross-section and conical shape. Inzh.sbor. 20:132-141 '54. (MLRA 8:7)
(Elastic rods and wires)

SOV/124-57-3-3472

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 3, p 122 (USSR)

AUTHOR: Nikolay, B. L.

TITLE: Graphical Frequency Determination of Natural Torsional Oscillations of Shafts (Graficheskoye opredeleniye chastot svobodnykh krutil'nykh kolebaniy valov)

PERIODICAL: Nauch. tr. Odessk. vyssh. morekhod. uch-shcha, 1955, Nr 1, pp 126-132

ABSTRACT: Analytical and graphical methods are given for the approximate calculation of the frequencies of natural torsional oscillations of a shaft loaded with concentrated masses.

V. G. Timoshenko

Card 1/1

SOV 124 58 2 2278

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 2, p 102 (USSR)

AUTHOR: Nikolay, B. L.

TITLE: On Some Simplifications in Calculations Pertaining to Structural Mechanics (O nekotorykh uproshcheniyakh v raschetakh stroitel'noy mekhaniki)

PERIODICAL: Nauchn. tr. Odessk. vyssh. morekhodn. uch shche 1956 Nr [illegible] pp 134-136

ABSTRACT: The author proposes a certain rationalization for computations performed by means of the multiplication formulas for trapezoidal diagrams.

I K Snitko

Card 1/1

NIKOLAY E L

NIKOLAY, E. L.

Giroskop v kardanovom podvese; teoriia dvizheniia bystro vrashchaiushchegosia giroskopa s uchetom vliianiia trenii na osiakh podvesa. Moskva, Gostekhizdat, 1944. 82 p., diagrs.

Title tr.: The gyroscope with a cardanic suspension; theory of the motion of a gyroscope rotating at high speed, considering the friction of its pivots.

QA862.G9N52

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

[illegible]

NIKOLAY, E. L.

Giroskop i nekotorye ego tekhnicheskie primeneniia v obshchedostupnom izlozhenii.. Moskva, Gostekhizdat, 1947. 152 p., illus.

Title tr.: The gyroscope and some of its applications. Popular description.

QA862.G9N5

SO; Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

NIKOLAI, E. L.

Teoriia giroskopov. Leningrad, Gostekhizdat, 1948. 1 1 p., diagrs.

Title tr.: Theory of the gyroscope.

QA862.G9N53

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

NIKOLAY, E.L

NIKOLAY, E. L.

Teoreticheskaia mekhanika. Dopushcheno v kachestve uchebnika dlia vysshikh tekhn. ucheb. zavedenii. Moskva, Gosizdat, 1950. 2 v., diagrs.

Title tr.: Theoretical mechanics. Approved as a textbook for schools of advanced technical studies.

Contents: 1. Statika. Kinematika. (Statics. Kinetics.) 1., izd. 1950. 2. Dinamika. (Dynamics.) [illegible]. izd. 1950.

QA805.N604 1950

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

Nikolay, E.L.

NIKOLAI, E. L.

Teoreticheskaia mekhanika. Dopushcheno v kachestve uchebnika dlia vysshikh tekhn. ucheb. zavedenii. Moskva, Gostekhizdat, 1951-1952. 2 v., diagrs.

Title tr.: Theoretical mechanics. Approved as a textbook for schools of advanced technical studies.

Contents: 1. Statika. Kinematika. (Statics. Kinetics.) 1. izd. 1951. 2. Dinamika. (Dynamics.) Izd. 10, 1952.

QA805.N646

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

NIKOLAY, K.V., inzh.

More about the collapse of reinforced concrete beams.
Transp. stroi. 11 no.8:44-45 Ag '61. (MIRA 14:9)
(Beams and girders)

BEGAM, L.G., kand.tekhn.nauk; VOLCHENKOV, G.Ya., inzh.; NIKOLAY, K.V., inzh.

Using single culverts without inlets. Transp. stroi. 12 no.12:37-39 D '62. (MIRA 16:1)

(Culverts)

NIKOLAYCHIK, I.D., sanitarnyy vrach

Eye injuries on the streets of urban areas with varying degrees of air pollution. Gig. i san. 26 no.8:68-69 Ag '61. (MIRA 15:4)

1. Iz Dneprovskoy rayonnoy sanitarno-epidemiologicheskoy stantsii Dneprodzerzhinska.
(EYE--WOUNDS AND INJURIES) (DNEPRODZERZHINSK--AIR POLLUTION)

TSYKHAN, A.I., kand. tekhn. nauk; NIKOLAYCHIK, L.F.

Distinguishing reflected signals by intensive direct excitation in sonar detection systems of nonuniformities of rocks. Vop. pered. inform. 3:72-76 '64. (MIRA 18:1)

KOROBOV, M. M.; Prinimali uchastiye: NIKOLAYCHUK, I. M.; KONDAKOV, V. N.; ASAULENKO, I. A.

Hydraulic conveying of distiller's grain in breweries. Spirt. prom. 28 no.8:18-19 '62. (MIRA 16:1)

1. Kiyevskiy tekhnologicheskiy institut pishchevoy promyshlennosti im. Mikoyana.

(Hydraulic conveying) (Breweries)

NIKOLAYCHIK, M. P.

USSR/Engineering - Foundry, Technology Feb 51

"Practice of Manufacturing Castings From Cast Iron With Spheroidized Graphite," M. P. Nikolaychik, Engr, STZ

"Litey Proiz" No 2, pp 31-33

Proper combination of optimum temp of modification and chem compn of metal may result in product with shrinkage similar to that of ordinary gray cast iron. Discusses subject and illustrates with examples. Describes improved method for introduction of magnesium into molten cast iron in ladle and suggests most convenient design of submerging bell for this purpose.

185T55

NIKOLAYCHIK, M. P.

USSR/Miscellaneous-Metallurgy

Card 1/1

Authors : Sukharchuk, Yu. S., and Nikolaychik, M. P.

Title : Smelting of nonbriquetted shavings (chips) in the foundry cupola

Periodical : Lit. Proizv. 1, 30 - 31, Jan-Feb 1954

Abstract : Experiments were conducted at the Stalingrad Tractor Plant to determine whether non-briquetted shavings (steel, cast iron, etc) could be smelted in the foundry cupola in an ordinary oxidation atmosphere without using lumb materials in the batch. The shaving, having a greater contact surface with the combustion products and small crossectional areas easily heats to a melting point and melts rapidly. This, of course, reduces the smelting period by almost one half as compared with the smelting of lumb material. Graphs.

Institution: ....

Submitted : ....

NIKOLAYCHIK, N.

The Kirghiz Trade Union Council works in the old way. Sov. profsoiuzy 19 no.12:6-7 Je '63. (MIRA 16:8)

1. Starshiy instruktor organizatsionno-instruktorskogo otdela Vsesoyuznogo tsentral'nogo soveta professional'nykh soyuzov, Frunze.
(Kirghizistan—Trade unions)

SHAKHMAGON, N.V., inzh.; NIKOLAYCHIK, N.N., inzh.

Intensifying the process of clinker firing using sodium fluosilicate additives. Nauch. soob NIITSementa no.9:13-18 '60. (MIRA 14:5)
(Sodium fluosilicates) (Cement clinkers)

NIKOLAYCHUK, N.P.

5

④ Matl

Journal of the Iron and Steel
Institute
Vol. 176 Part 3
Mar. 1954
Foundry Practice

The Use of Chrome Magnesite Refractories for Lining Cupolas. N. P. Nikolaichik, V. M. Chebotarev, D. E. Beletskii, and L. A. Aniukhina. (*Liteinoe Proizvodstvo*, 1953, 3, (3), 18-19). [In Russian]. Experience in the use of different refractories for lining cupolas is briefly reviewed, and details are given of the use of chrome magnesite brick with over 38% magnesia and 15-20% chromic oxide in the melting zone. The chrome-magnesite bricks were found to need repair, mainly directly above tuyeres, after operating for eight days. The normal firebricks usually lasted only two days. No changes occurred in the fluidities of iron or slag on changing to chrome-magnesite brick, nor in the temperature or composition of the iron in the runner. Changes in the composition of the slag are tabulated. S. K.

HF
4-26-54

NIKOLAYCHIK, N. P.

Nikolaychik, N. P. -- "Author's Abstract of a Dissertation in Competition for the Academic Degree of Candidate in Technical Sciences on the Subject "Investigation of the Qualitative Characteristics of Molds Depending of the Composition of the Form, its Thermal Resistance, and the Configuration of the External Surface" Min Higher Education USSR, Moscow Order of Labor Red Banner Higher Technical School imeni Bauman, Moscow, 1954 (Dissertation for the Degree of Candidate in Technical Sciences)

SO: Knizhnaya Letopis', No. 23, Moscow, Jun 55, pp 87-104

NIKOLAYCHIK, N.P., inzhener; LEUTA, V.I.; inzhener, redaktor; RUDENSKIY Ia.V., tekhnicheskiy redaktor

[Calculating the charge for cupola furnaces] Raschet shikht dlia vagranok. Kiev, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry ukrainskoe otdelenie, 1955. 77 p. (MLRA 8:7)
(Cupola furnaces)

NIKOLAYCHIK, N.P.

419*. Quality of Castings in Relation to Thermal Resistance of Molds and Cores. Issledovanie kachestva otlivok v zavisimosti ot teplovogo soprotivlenila form i sterzhnei. (Russian.) N. P. Nikolaichik. *Liteinoe proizvodstvo*, 1955, no. 9, Sept., p. 20-22.

Evaluation of fire-clay, sand, and special mixtures for molds and cores; effect of bottom pouring. Micrographs, tables. 3 ref.

NIKOLAYCHIK, Nikolay Panteleyevich, dotsent, kandidat tekhnicheskikh nauk;
KRYLOV, V.I., redaktor; SIDOROV, V.N., redaktor izdatel'stva;
PETROVA, N.S., tekhnicheskiy redaktor

[Increasing the durability of cast iron casting molds] Povyshenie stoikosti chugunnykh izlozhnits. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1956. 235 p. (MIRA 9:11)
(Founding)

362

AUTHORS: Nikolaychyk, N. P., Cand. Tech.Sc. and Nikolaychyk, E.N., Engineer (White Russian Institute of Railway Transport Engineers).

TITLE: The use of ultrasonic waves for improving ingot quality. (Uluchsheniye kachestva slitkov pri pomoshchi ul'trazvuka).

PERIODICAL: "Stal'" (Steel), 1957, No.4, pp. 322-325 (U.S.S.R.)

ABSTRACT: An investigation of the influence of ultrasonic waves on the quality of castings was carried out initially on paraffin models. For heating ingot tops an ultrasonic heater was used. A description of the experimental equipment is given (Fig.4). Paraffin and stearin cast into moulds with ultrasonic waves at 56°C, did not solidify but an increase in temperature up to 150° was observed. Thus, the apparatus acted as an ultrasonic heater. To start solidification, the ultrasonic generator was switched off and only after cooling to 56° was it switched on again with a considerable reduction in power. Ingots so obtained were uniform and possessed a very fine grain structure. For studies of the influence of ultrasonic waves on crystallisation of iron-carbon alloys, two designs of ingot moulds were developed: one with magnetostriction (Figs. 6 and 7 with bottom and top radiator respectively) and the other with piezoelectric radiators (Fig.9). Castings were made from rimming and killed steels.

362

The use of ultrasonic waves for improving ingot quality. (Cont.)

The macrostructure of rimming steel ingots cast with ultrasonic waves contained only fine bubbles (0.5 - 2mm) at a distance of 25-40 mm from the external surface. The surface area of the bubbles was only a few percent of the whole cross-section of the specimen (Fig.8a). While ingots cast without ultrasonic waves possessed very coarse bubbles (5-25 mm) at a distance of 10 mm from the external surface occupying about 50% of the total cross-section area of the specimen (Fig.8b). Sheets 2 mm thick were rolled from the experimental ingots. After 3 months the sheets were stamped. Sheets from ingots cast with ultrasonic waves possessed a high plasticity: for 100 specimens stamped with 35-40% elongation not a single one was broken. While 57% of specimens from ingots cast without ultrasonic waves stamped under the same conditions were defective. Rimming steel cast with ultrasonics had only traces of nitrogen and oxygen while that without ultrasonics containing 0.059% of oxygen and 0.026% of nitrogen. Microscopic examination of the metal cast with ultrasonics showed that it had a uniform structure with ferrite grains corresponding to size 8 while that cast in the usual way, sizes of ferrite grains corresponded to sizes 5, 6 and 7, moreover on the grain boundaries a

The use of ultrasonic waves for improving ingot quality. 362
(Cont.)

network of nitrides was observed. A comparison of mechanical properties of the metal cast with and without ultrasonic action is given in the table. It is concluded that the use of ultrasonic waves improves the macro- and microstructure, decreases gas solubility and improves the mechanical properties of the metal. There are 9 figures and 1 table.

NIKOLAYCHIK, N.P.

AUTHORS: Nikolaychik, N.P. (Cand.Tech.Sc.) and Nikolaychik, E.N., (Engineer).

133-6-32/33

TITLE: Aluminising of cast iron ingot moulds. (Alitirovaniye chugunnykh izlozhnits).

PERIODICAL: "Stal'" (Steel), 1957, No.6, pp.571-573 (USSR).

ABSTRACT: The influence of the aluminising of the internal surface of ingot moulds on their durability was investigated. Three methods of aluminising were used: 1) from powdered mixtures, 2) in bath with molten aluminium and 3) by spraying aluminium on the surface of moulds with subsequent diffusion annealing. 1) Three types of powder mixtures containing aluminium, ferroaluminium alloy and ferroaluminium copper alloy respectively were tested. The first two powders contained kaolinite (49 and 20%) and all powders contained ammonium chloride (2, 1 and 0.5% respectively). After coating the internal surface of the ingot moulds with one of the above mixtures, they were heated for 8 hours at 900-1000 C, cleaned with brushes and compressed air and annealed for 4 hours at 900 C with subsequent slow cooling. Each aluminising mixture was tested on 10 moulds (small mould for casting samples). The thickness of the

Card 1/3

133-6-32/33

Aluminising of cast iron ingot moulds. (Cont.)

aluminised layer was 1 mm. The durability of moulds increase 5-6 times. 2) Aluminising with liquid aluminium (with 6% iron to prevent erosion of the surface by aluminium) was done by dipping ingot moulds into an aluminium bath for 60 min and subsequent diffusion annealing at 950 C. The thickness of the aluminised layer was 0.45 to 0.5 mm. Two 2 ton ingot moulds were also aluminised by heating them with gas burners to 800 C and filling with aluminium. Heating was continued for 60 min. After slow cooling and removal of the aluminium ingots, the moulds were used without annealing. Two aluminised moulds withstood 64 and 48 castings while untreated moulds 41 and 30 castings. 3) Internal surfaces of ingot moulds were cleaned and sprayed with molten aluminium to form a layer 0.4-0.5mm thick (5-6 layers). The aluminised surface was then coated with 20% solution aluminium chloride and a liquid soda glass. The glass layer was covered with powdered marshalite and again coated with the glass. Aluminised moulds were heated to 1000 C during 7 hours, soaked for 1 hour and then slowly cooled. The depth of aluminised layer was 0.5-0.6 mm. All aluminised moulds (6.7 ton) withstood 115-127 castings against mean mould life of

Card 2/3

Aluminising of cast iron ingot moulds. (Cont.) 133-6-32/33

45 castings. The structure of the aluminised layer was as follows: outside zone (32-35% Al) brittle, middle zone (20-25% Al) less brittle, the internal zone consisted of a solid solution of aluminium in α iron with fine graphite inclusions and from a layer of α iron with larger graphite inclusions. Deficiency of aluminised moulds is the tendency to the formation of longitudinal cracks. It is concluded that the use of the aluminising process preserves the internal surface of ingot moulds from fire cracking and increases their durability more than twice. Aluminising should be used for moulds with a tendency to fail due to surface firecracking. The following participated in the work: I.M.Yurov, N.S.Likhoded and A.A.Kulya (students). There are 2 figures.

AVAILABLE: Library of Congress
Card 3/3

NIKOLAYCHIK, N.P.

5

Improving ingot quality by supersonic waves. Nikolaichik and [illegible]

Expts. conducted on 300 X 250 X 600-mm. molds provided with top or bottom ultrasonic radiators both on killed and open steels showed that the practice reduces the vol. of blowholes from 50 to a few per cent of the cross section, decreases their size, and thickens the rim of clean metal. After rolling into 2-mm. sheets and a 3-month aging, supersonically treated sheets stood 100% a 35-40% draw, while 57% of untreated sheets failed, the former being both stronger and more ductile. A gray iron before supersonic treatment had a tensile strength of 18 kg./sq. mm. and no elongation; after it the metal had a tensile strength of 50 kg./sq. mm. and 5% elongation.

J. D. Gat

4E4c

MT

BELORUSSIAN INST. RAILROAD TRANSPORT ENGINEERS

NIKOLAYCHIK, N.P.

18 18

4E2c

Calorizing cast-iron ingot molds. N. P. Nikolaichik and R. N. Nikolaichik. Stal' 17, 671-2 (1957).—Casting the inside of the molds with an Al alloy layer either by conventional calorizing or by immersion molds in Fe-satd. molten Al for 60 min. and then annealing them at 950° improves ingot-mold life. Big-end-down 6.7-ton molds treated in this manner stood 115-197 heats as compared with 45 for untreated; all failed by longitudinal cracking. J. D. Gat—

6

NIKOLAYCHIK, N.P.; NIKOLAYCHIK, Ye.N.

Casting iron parts with use of ultrasonics. Lit. proizv. no.2:25
F '58. (MIRA 11:3)

(Iron founding)
(Ultrazonic waves--Industrial applications)

NIKOLAYCHIK, Nikolay Panteleyevich; NIKOLAYCHIK, Yevgeniy Nikolayevich; FURSOV, S., kand.tekhn.nauk, retsenzent; ALEKSEYEVA, Ye., red.; VORONTSOVA, Z., tekhn.red.

[Ultrasonics in the national economy] Ul'trazvuk v narodnom khoziaistve. Izhevsk, Udmurtskoe knizhnoe izd-vo, 1959. 54 p. (MIRA 13:12)

(Ultrasonic waves--Industrial applications)

18(3,7)

SOV/128-59-7-16/25

AUTHOR: Nikolaychik, N.F., Candidate of Technical Sciences, and Nikolaychik, Ye.N., Engineer

TITLE: On the Nature of X-Phase in Iron Ingot Molds

PERIODICAL: Liteynoye Proizvodstvo, 1959, Nr 7, pp 37-39 (USSR)

ABSTRACT: When checking the inner surfaces of ingot molds often the formation of many cracks can be observed. In certain areas cracks are of such a dimension that the liquid steel fills these cracks thus rendering the removal of the ingots more difficult. Such cracks are produced by the expansion of the cast iron (which is determined by the contents of carbon) and by the inner stress. To reduce this influence a smaller amount of carbon in the metal is suggested. As a second factor the inner oxidation, which is dependent on the amount of graphite and on the eutectoidal system, plays a role. Those two phases, named X and X_1, have been named the phase with the "blue ghost line" by Soviet

Card 1/3

SOV/128-59-7-16/[illegible]

On the Nature of X-Phase in Iron Ingot Molds

authors (Liteynoye Proizvodstvo, 1958, Nr 11). The structure analysis by means of x-rays showed that in the areas of the ingot molds that formerly contained graphite in flocks not one layer of FeO can be found but an intermediate layer of Fe and Fe_3O_4, etc., is present. There follows the description of the mechanism for the formation of the Y-phase in cast iron ingot molds. During this process the contents of sulphur (from the coke) has a great influence on the surface of the ingot molds. The author has made experiments with 4 different types of ingot molds. For casting with 4 cast iron ingot molds 2 of them had been painted with mold blackening for metallurgical coke with a contents of [illegible],2% S and the other 2 had been painted with mold blackening for foundry coke with a contents of 0,2% S. The first two ingot molds had been severely damaged after 16 pourings, the other two after 60 pourings only. Two micro-photographs and one

Card 2/3

SOV/12[illegible]

On the Nature of X-Phase in Iron Ingot Molds

table list the results. It is suggested to paint the walls of the ingot molds with a coat of aluminum forming Al_2O_3 during pouring as a protection against corrosion. There are 1 diagram, 4 micro-photographs and 6 Soviet references

Card 3/3

NIKOLAYCHIK, Nikolay Panteleyevich, kand. tekhn. nauk; SLITSKAYA, I.M., inzh., red.; SHILLING, V.A., red. izd-va; GVIRTS, V.L., tekhn. red.

[New aluminum-base antifriction alloys; from practices of the Novocherkassk Electric Locomotive Plant] Novye antifriktsionnye splavy na aliuminevoi osnove; iz opyta Novocherkasskogo elektrovozostroitel'nogo zavoda. Leningrad, 1961. 21 p. (Leningradskii Dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Liteinoe proizvodstvo, no.7) (MIRA 14:9)
(Aluminum alloys—Metallography)

NIKOLAYCHIK, N.P.

New bearing alloys. Lit.proizv. no.11:37-38 N '62. (MIRA 15:12)

(Bearing metals) (Aluminum founding)

NIKOLAYCHIK, N.P., kand.tekhn.nauk

Use of aluminum in the manufacture of electric locomotives. Vest. elektroprom. 33 no.10:38-40 O '62. (MIRA 15:9)
(Electric locomotives)
(Aluminum)

VLASOV, A.Ya.; POPOVA, A.V.; KOVALENKO, G.V.; NIKOLAYCHIK, N.V.

Paleomagnetic studies of Paleozoic sedimentary rocks in central Siberia. Geol.i geofiz. no.12:95-99 '61. (MIRA 15:5)

1. Institut fiziki Sibirskogo otdeleniya AN SSSR, g. Krasnoyarsk.
(Siberia--Rocks, Sedimentary)

VLASOV, A.Ya.; NIKOLAYCHIK, N.V.

Paleomagnetic studies of the Mesozoic of the Taymyr and the central part of Krasnoyarsk Province. Izv. AN SSSR. Ser. geofiz. no.11:1700-1701 N '64. (MIRA 17:12)

1. Institut fiziki Sibirskogo otdeleniya AN SSSR.

4

L 41305-65 EPA(s)-2/EWT(m)/EPF(c)/EPR/EWP(j)/T Pc-4/Pr-4/Ps-4 WW/RM

S/0286/65/000/006/0059/0059

43

ACCESSION NR: AP5008542

AUTHOR: Kulakovskiy, V. A.; Polishchuk, S. M.; Volovich, Z. M.; Zektser, A. I.; Andreyevskaya, G. D.; Zelenskiy, E. S.; Senyanskiy, V. N.; Kosorygin, L. V.; Nikolaychik, V. I.

B

TITLE: A device for producing cylindrical shells made of transparent plastic. Class 39, No. 169238

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 6, 1965, 59

TOPIC TAGS: transparent plastic, cylindrical shell, industrial equipment

ABSTRACT: This Author's Certificate introduces a device for producing cylindrical shells made of transparent plastic. The unit incorporates a melting pot and a vat with a roller for coating. The device is also equipped with a stretching and a compensating mechanism which are located over the shell forming mechanism. The shell forming mechanism includes units for longitudinal and transverse winding of filaments as well as a polymerizer. The shell forming unit is made in the form of chucks with a horizontal axis. Along the perimeter of these chucks are a number of arbors which interact with the transverse and longitudinal winding mechanisms. The

15

Card 1/2

L 41305-65

ACCESSION NR: AP5008542

0

longitudinal winding mechanism is a belt driven or friction driver reciprocating carriage mounted on a guide parallel to the axis of the arbor.

ASSOCIATION: none

SUBMITTED: 21Jun61

ENCL: 00

SUB CODE: [illegible], IE

NO REF SOV: 000

OTHER: 000

Card 2/2

NIKOLAYCHIK, E.N.

AUTHORS: Nikolaychik, N.P. (Cand.Tech.Sc.) and Nikolaychik, E.N., (Engineer).

133-6-32/33

TITLE: Aluminising of cast iron ingot moulds. (Alitirovaniye chugunnykh izlozhnits).

PERIODICAL: "Stal'" (Steel), 1957, No.6, pp.571-573 (USSR).

ABSTRACT: The influence of the aluminising of the internal surface of ingot moulds on their durability was investigated. Three methods of aluminising were used: 1) from powdered mixtures, 2) in bath with molten aluminium and 3) by spraying aluminium on the surface of moulds with subsequent diffusion annealing. 1) Three types of powder mixtures containing aluminium, ferroaluminium alloy and ferroaluminium copper alloy respectively were tested. The first two powders contained kaolinite (49 and 20%) and all powders contained ammonium chloride (2, 1 and 0.5% respectively). After coating the internal surface of the ingot moulds with one of the above mixtures, they were heated for 8 hours at 900-1000 C, cleaned with brushes and compressed air and annealed for 4 hours at 900 C with subsequent slow cooling. Each aluminising mixture was tested on 10 moulds (small mould for casting samples). The thickness of the

Card 1/3

Aluminising of cast iron ingot moulds. (Cont.) 133-6-32/33

45 castings. The structure of the aluminised layer was as follows: outside zone (32-35% Al) brittle, middle zone (20-25% Al) less brittle, the internal zone consisted of a solid solution of aluminium in α iron with fine graphite inclusions and from a layer of α iron with larger graphite inclusions. Deficiency of aluminised moulds is the tendency to the formation of longitudinal cracks. It is concluded that the use of the aluminising process preserves the internal surface of ingot moulds from fire cracking and increases their durability more than twice. Aluminising should be used for moulds with a tendency to fail due to surface firecracking. The following participated in the work: I.M.Yurov, N.S.Likhoded and A.A.Kulya (students). There are 2 figures.

AVAILABLE: Library of Congress
Card 3/3

NIKOLAYCHIK, Ye.N.

5

4E2c

Improving ingot quality by supersonic waves. N. P. Nikolaichik and E. N. Nikolaichik. *Stal'* 17, 322-5(1957). —Expts. conducted on 200 × 200 × 500-mm. molds provided with top or bottom ultrasonic radiators both on killed and open steel showed that the practice reduces the vol. of blowholes from 50 to a few per cent of the cross section, decreases their size, and thickens the rim of clean metal. After rolling into 2-mm. sheets and a 3-month aging, supersonically treated sheets stood 100% a 35-40% draw, while 57% of untreated sheets failed, the former being both stronger and more ductile. A gray iron before supersonic treatment had a tensile strength of 18 kg./sq. mm. and no elongation; after it the metal had a tensile strength of 50 kg./sq. mm. and 5% elongation. J. D. Gat

MT

Belorussian Inst. Railroad Transport Engineers

NIKOLAYCHIK, YE. N

NIKOLAYCHIK, N.P.; NIKOLAYCHIK, Ya.N.

Casting iron parts with use of ultrasonics. Lit. proizv. no.2:25
F '58. (MIRA 11:3)

(Iron founding)

(Ultrazonic waves--Industrial applications)

NIKOLAYCHIK, Nikolay Panteleyevich; NIKOLAYCHIK, Yevgeniy Nikolayevich;
FURSOV, S., kand.tekhn.nauk, retsenzent; ALEKSEYEVA, Ye., red.;
VORONTSOVA, Z., tekhn.red.

[Ultrasonics in the national economy] Ul'trazvuk v narodnom khoziaistve. Izhevsk, Udmurtskoe knizhnoe izd-vo, 1959. 54 p.
(MIRA 13:12)

(Ultrasonic waves--Industrial applications)

NIKOLAYCHIK, Ye.N.

Macrostructure of low pressure castings. Lit. proizv. no.6:
43-44 Je '64. (MIRA 18:5)

NIKOLAYCHUK, A., polkovnik

Found out the causes and then... Av. i kosm. 48 no.12:44-45 D '65.
(MIRA 19:1)

BONDAR', A.D.; YEMLYANINOV, A.S.; KLYUCHAREV, A.P.; LISHENKO, L.G.;
MEDYANIK, V.N.; NIKOLAYCHUK, A.D.; SHALAYEVA, O.Ye.

Making metal films of isotopes. Prib. i tekh. eksp. no.3:134-136
My-Je '60. (MIRA 14:10)

1. Fiziko-tekhnicheskiy institut AN USSR.
(Metallic films)

pa

82000
S/120/60/000/03/040/055
E032/E514

21.3200

AUTHORS: Bondar', A.D., Klyucharev, A.P., Lishenko, L.G. and Nikolaychuk, A.D.

TITLE: Preparation of Isotopic Chromium Targets 19 from Cr_2O_3

PERIODICAL: Pribory i tekhnika eksperimenta, 1960, No 3, pp 137-138

ABSTRACT: A new method is reported which can be used to obtain CrI_2 at 300°C in a molybdenum glass container and then convert it into ductile chromium foils. The authors had at their disposal stable isotopes of chromium in samples of about 100 mg each and in the form of Cr_2O_3. In order to transform Cr_2O_3 into the soluble form, the usual method described by Nekrasov (Ref 5) was employed. The chromium was then deposited on an Hg cathode from a 0.1 N sulphuric acid solution. In order to obtain a complete separation of the chromium, a current of 0.75 A was passed for 1.5 to 2 hours. The amalgam obtained in this way was then filtered through chamois leather under vacuum. After removing the surplus mercury the chromium amalgam was placed in the apparatus shown in Fig 1. The

Card 1/4

(1)

X

82000

S/120/60/000/03/040/055
E032/E514

Preparation of Isotopic Chromium Targets from Cr_2O_3

amalgam was introduced through the tube 7 into the retort 8 and the tube was sealed off. Next, an iodine ampoule 2 was introduced through the tube 5. The block 4 was introduced through the tube 5 in a similar way and the latter was sealed off. The whole assembly was connected to a vacuum pump through the tube 3 and the retort was placed in a furnace in which it was heated up to 200°C. The mercury was driven off from the amalgam into the receiver 1 and the whole apparatus was sealed off at A, while the mercury receiver was sealed off at Б. The block 4 was then used to break the iodine ampoule, the iodine was driven into the retort and the apparatus was sealed off at B. The retort was then heated to 300°C for 30 to 40 min and the chromium iodide obtained was collected in 6. The surplus iodine and mercury iodide was driven into the retort by heating the ampoule 6 up to the knee Д to 300°C. The ampoule containing the chromium iodide was sealed off at Г. The ampoule containing the chromium

Card 2/4

iodide was broken under toluene and the chromium iodide together with the toluene was placed in a ceramic crucible lined with molybdenum foil. All the subsequent operations were carried out in a metal vacuum chamber connected to the vacuum pump through a liquid nitrogen trap. The latter condensed all the volatile products such as toluene, iodine etc. The evaporator employed is shown schematically in Fig 2 in which 1 are current leads, 2 are insulators, 3 is a tungsten spiral, 4 is a ceramic crucible, 5 is a molybdenum jacket, 6 is a flange, 7 is the molybdenum lining, 8 is a ceramic crucible, 9 is a molybdenum container and 10 is a holder. After the toluene had been driven off the molybdenum foil base was heated to about 1050°C and the chromium iodide to 800°C. On striking the molybdenum foil the chromium iodide dissociated, the chromium was deposited on the base and the iodine was condensed out by the trap. In this way chromium foils 1 to 15 μ thick

82000

S/120/60/000/03/040/055
E032/E514

Preparation of Isotopic Chromium Targets from Cr_2O_3

could be obtained. There are 2 figures and five Soviet references.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN UkrSSR (Physico-Technical Institute, Ac.Sc., UkrSSR)

SUBMITTED: May 22, 1959

Card 4/4

NIKOLAYCHUK, A.D.

S/048/60/024/[illegible]
B019/B060

AUTHORS: Bondar', A. D., [illegible], [illegible],
Lishenko, L. S., [illegible], [illegible],
Shalayeva, D. Ye.

TITLE: The Production of Isotope Targets for Nuclear Research

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1960, Vol. 24, No. 7, pp. [illegible]

TEXT: This article is the reproduction of a lecture delivered at the 10th All-Union Conference on Nuclear Spectroscopy held in Moscow from January [illegible] to 27, 1960. Methods of preparing foils from the elements are discussed. The authors used three methods for the preparation of free foils: electrolytic deposition, evaporation in vacuum by heating, and thermal dissociation. The principal characteristics of the three methods are briefly outlined. In the case of the electrolytic deposition, e.g., the selection of the right electrolyte is extremely important, the working conditions play a great part and so does the regeneration of the isotope. In the method of thermal dissociation, an important factor is the selection of the chemical compound

Card 1/3

and the temperature conditions, and as for the evaporation method, [illegible] and construction of the vaporizer are very important. Table 1 gives data for the preparation of foils from the elements Ti, [illegible] Ag, Cr, Sn by the electrolytic procedure, and specifies the [illegible] of electrolytes and the operational conditions [illegible] foils were prepared by [illegible] perchloric acid with an [illegible]. In [illegible] geneous Pb deposition, the anode was [illegible] of Ge and Be foils by the evaporation [illegible] of times, but the large isotope losses have never been [illegible]. With a view to reducing these losses the authors made use of a [illegible] (Fig. 2), out of which Ge and Be were evaporated onto [illegible]. The preparation of foils from other elements by this method is briefly [illegible]. Foils of Zr, Ti, and Cr were prepared by thermal [illegible]. This method involves the use of volatile compounds of these metals; the [illegible] shown in Fig. [illegible] for the preparation of [illegible] is described. To prepare chromium iodide, the authors [illegible]. They prepared a paste-like silver [illegible] iodide sealed in an ampul with the [illegible] at a temperature

Card 2/3

of 300°C. The ampul was broken under toluene and the chromium iodide was poured into a crucible (Fig. 5) together with the toluene. The crucible was then evacuated in a vacuum chamber, the toluene was evaporated, and the iodide was then heated to 800°C. The evaporating iodide was passed over a heated base, where it decomposed. The chromium deposited on the base, while the iodine was intercepted. The targets prepared by the methods described exhibit good properties. There are 5 figures, 1 table, and 10 references: 9 Soviet and 1 US.

ASSOCIATION: Fiziko-tekhnicheskiy institut Akademii nauk USSR (Institute of Physics and Technology of the Academy of Sciences UkrSSR)

Card 3/3

S/032/62/028/012/004/023
B124/B101

AUTHORS: Bondar', A. D., Karev, V. N., Klyucharev, A. P., and
Nikolaychuk, A. D.

TITLE: X-ray spectrum analysis of thin metal foils

PERIODICAL: Zavodskaya laboratoriya, v. 28, no. 12, 1962, 1446 - 1448

TEXT: Non-destructive determination of impurities in thin titanium, chromium, and zirconium foils was carried out by X-ray spectrum fluorescence analysis. The foils were obtained by decomposing the corresponding iodides on a molybdenum base which was then dissolved in nitric acid. Molybdenum diffuses into the foils at 1050 - 1250°C. Specimens of 20 mm diameter resulting from vacuum metallization of molybdenum on an aluminum film were used as external standards. If the foils are $\leq 1\ \mu$ the molybdenum content can be found directly on the calibration curve. If the molybdenum distribution is irregular, it can be determined approximately by irradiation from both sides. If the total impurity forms a thin layer on one side of the foil, then $I'_2 = I_0 e^{-\mu A}$ (2)

Card 1/2

X-ray spectrum analysis ...

S/032/62/028/012/004/[illegible]
B124/B101

with A = ($\frac{1}{\sin_1} + \frac{1}{\sin_2}$), and $\mu = \mu_0$, holds approximately for [illegible] tion in absorption of the MoK$_\alpha$ radiation from the other side. [illegible] intensity of MoK$_\alpha$-radiation on the side where the base is, μ [illegible] coefficient of absorption of the foil for characteristic X-rays, [illegible] are the angles between the foil surface and the primary and characteristic rays respectively, and ρ is the surface density of the [illegible] If molybdenum is distributed on the surface, $I_1' = I$ [illegible] is obtained on the assumption that the experimental [illegible] producing any intensity I_1'. The actual molybdenum value [illegible] with the [illegible] value of I_1 and I_1'. There are 1 figure and [illegible] most important English-language reference is: P. D. Zemany, [illegible]sky, J. Electrochem. Soc. 103, 157 (1956).

ASSOCIATION: Fiziko-tekhnicheskiy institut Akademii nauk USSR (Physico-technical Institute of the Academy of Sciences UkrSSR)

Card 2/2

NIKOLAYCHUK, H.D.

L 18248-63 EWT(d)/EWP(k)/EWP(q)/EWT(m)/BDS AFFTC/ASD Pf-4 JD/HN/JG

ACCESSION NR: AP3002116 S/0185/63/008/006/0628/0632

72
71

AUTHOR: Karev, V. M.; Klyucharev, A. P.; Nazarova, T. S.; Ny*kolaychuk, A. D.; Reshetova, L. M.

TITLE: Investigation of foils obtained by thermal dissociation method

SOURCE: Ukrains'kyy fizychnyy zhurnal, v. 8, no. 6, 1963, 628-632

TOPIC TAGS: pyrolytic deposition, thermal dissociation, Ti target, Zr target, Hf target, nuclear target, beam target, Mo impurity, Ti foil, Zr foil, Hr foil, foil target, iodide dissociation, target preparation.

ABSTRACT: Results are given of investigations directed toward the reduction of molybdenum impurities in foils (targets for nuclear measurements) of Ti, Zr and Hf, which were obtained by the thermal dissociation method (pyrolytic deposition). The effect of iodide dissociation temperature on the quantity of Mo impurities was studied. For this purpose, intermediate layers of carbon were used, resulting in a decrease in Mo content by about one-half. The dissociation temperatures were varied between 850 C and 1200 C. Composition of the foils studied is given in Table 1, the effect of carbon layers on Mo content -- in Table 2, and the results of chemical and X-ray spectrum analysis are given in Table 3.

Card 1/2

L 18248-63

ACCESSION NR: AP3002116

The latter method of analysis is the more suitable since it does not require destroying the expensive isotope targets. The X-ray spectrum method allows not only the determination of the percent content but also the foil thickness at any point. The results are represented graphically. Orig. art. has: 2 formulas, 2 figures and 3 tables.

ASSOCIATION: Fiziko-Tekhnichny*y Insty"tut AN URSR, Kharkov (Physics-Technical Institute of the UkrSSR Acad. Sc.)

SUBMITTED: 12 Dec 62 DATE ACQ: 12 Jul 63 ENCL: 00

SUB CODE: NS, PH NO REF SOV: 007 OTHER: 00

Card 2/2

KLYUCHAREV, A.P. [Kliuchariev, O.P.]; PALATNIK, L.S. [Palatnyk, L.S.];
NIKOLAYCHUK, A.L.

X-ray structural analysis of isotope targets designed for nuclear research. Ukr.fiz.zhur. 10 no.12:1369-1371 D '65.
(MIRA 19:1)

1. Fiziko-tekhnicheskiy institut AN UkrSSR, Khar'kov, i Khar'kovskiy politekhnicheskiy institut im. Lenina. Submitted April 19, 1965.

L 46704-66 EWT(m)/EWP(w)/T/EWP(t)/ETI IJP(c) WW/JD/JG/WB/GD

ACC NR: AT6020709 (N) SOURCE CODE: UR/0000/65/000/000/0110/0117

AUTHOR: Klyucharev, A. P.; Nikolaychuk, A. D.; Lyubchenko, A. P.

ORG: Physicotechnical Institute, AN UkrSSR (Fiziko-tekhnicheskiy institut AN UkrSSR)

TITLE: Investigation of the properties of titanium, zirconium, and hafnium coatings deposited by the photodissociation method

SOURCE: AN UkrSSR. Fizika metallicheskikh plenok (Physics of metal films). Kiev, Naukova dumka, 1965, 110-117

TOPIC TAGS: titanium, zirconium, hafnium, metal film, protective coating, refractory coating, corrosion protection

ABSTRACT: The authors investigated the feasibility of depositing anti-corrosion coatings of Ti, Zr, and Hf on metals and alloys by a thermodissociation (iodide) method, with a directed flow of iodides of these elements in a continuously evacuated system. This method was previously proposed by the authors (UFZh, 1962, v. 8, 1027) for the production of thin isotopic foils. The advantages of the method over others are described in detail. The produced coatings were tested for porosity (by the ferroxyl method), corrosion resistance (by comparison with Cd, Zn, Ni, or steel coatings), and electrochemical characteristics (by electrode potential measurements). The results showed that Ti, Zr, and Hf coatings 5 μ thick had more corrosion resistance than Zn, Cd, and Ni coatings 20 μ thick. Microstructure and phase-composition tests showed the coatings to be homogeneous and to have higher microhardness than the protected

Card 1/2

L 46704-66

ACC NR: AT6020709

metal. It is concluded that the proposed method can yield machine parts of high corrosion and heat endurance. Orig. art. has: 2 figures and 1 table.

SUB CODE: 20, 11/ SUBM DATE: 30Oct64/ ORIG REF: 004/ OTH REF: 002

Card 2/2

TUROV, A.Sh.; NIKOLAYCHUK, A.V.

Perfecting a spray device for the washing of vacuum-filters. Nefteper. i neftekhim. no.8:41-42 '64. (MIRA 17:10)

1. Novo-Ufimskiy neftepererabatyvayushchiy zavod.

TUROV, A.Sh.; [illegible], A.V.

Results of redesigning an oil-extracting device. Nef [illegible]. i neftekhim. no.[illegible] '63. (MIRA 17:8)

1. Novo-Ufimskiy neftepererabatyvayushchiy zavod.

TUROV, A.Sh.; MARINTSEVA, A.V.; NIKOLAYCHUK, A.V.

Means for intensifying the deoiling process. Nefteper. i neftekhim. no.6:6-12 '65. (MIRA 18:7)

1. Bashneftekhimzavody.

[illegible]

KOROBOV, M.M.; NIKOLAYCHUK, I.M.

Pneumatic installation for conveying distillers' dried solubles at the Petrovskiy Alcohol Plant. Spirt.prom. 23 no.8:22 '57. (MIRA 11:1)

(Petrovskiy (Ivanovo Province)--Pneumatic-tube transportation)

FEDOROV, P.D.; STABNIKOV, V.N.; GLYBIN, I.P.; BELYAVSKIY, V.V.; BOYCHENKO, N.G.; BUZYKIN, N.A.; GOLOVIN, P.V.; DEMCHUK, A.P.; ZHURA, K.D.; KORCHINSKIY, A.I.; KURILENKO, O.D.; KLIMKO, N.G.; LITVAK, I.M.; MAL'TSEV, P.M.; NIKOLAYCHUK, I.M.; NAUMOV, A.L.; POPOV, V.D.; RED'KO, F.A.; SKOBLO, D.I.; KHRISTENKO, M.M.; TSYGANKOV, P.S.; SHLIPCHENKO, Z.S.; SHVETSOV, P.D.

Gleb Mikhailovich Znamenskii; obituary. Sakh. prom. 31 no.12:68 D '57. (MIRA 11:1)

(Znamenskii, Gleb Mikhailovich, 1901-1957)

KOROBOV, M.M.; NIKOLAYCHUK, I.M.

Operation of a pneumatic processing unit. Spirt. prom. 24 no.8:30 '58. (MIRA 11:12)

(Pneumatic-tube transportation)

KOROBOV, M.M.; NIKOLAYCHUK, I.M.; KONDAKOV, V.N.; ASAULENKO, I.A.

Study of the hydraulic transportation of barley. Izv.vys.ucheb.zav.; pishch.tekh. no.4:99-106 '60. (MIRA 13:11)

1. Kiyevskiy tekhnologicheskiy institut pishchevoy promyshlennosti. Kafedra tekhnologii brodil'nykh proizvodstv.
(Barley—Pipelines) (Hydraulics)

KOROBOV, M.M.; KONDAKOV, V.M.; NIKOLAYCHUK, I.M.; GRITSYUK, I.G. [Hrytsiuk,
I.H.]

Calculation of basic parameters for the hydraulic conveying
of grain materials. Khar. prom. no.4:52-53 O-D '65.
(MIRA 18:12)

[illegible]

NIKOLAYCHUK, K.L., inzh.; SHUPTA, S.S.; BEL'MESOV, O.A., slesar'; ZHEREBTSOV, F.M., master; GOLOVANCHIKOV, A.M., mashinist elektrovoza.

Workers of Barabinsk train shed. Elek. i tepl. tiaga no.11:32-34 N '57. (MIRA 10:11)

1. Barabinsk, elektrovoznoye depo, Omskaya doroga. 2. Korrespondent gazety "Omskiy zheleznodorozhnik" (for Shupta).
(Railroads--Maintenance and repair)

COUNTRY : USSR

CATEGORY : Cultivated Plants. Grains. Legumes. Tropical Cereals. M

ABS. JOUR. : RZhBiol., No. 3, 1959, No. 10928

AUTHOR : Nikolaychuk, L., Yanchenko, K.

INST. : Krasnoyarsk State Pedagogical Institute.

TITLE : The Influence of the Planting Density of Corn Forms Different with Respect to Fast Ripening on the Yield and Fodder Qualities of the Green Roughage.

ORIG. PUB. : Uch. zap. Krasnoyarskiy gos. ped. in-t, 1957, 10, 99-109.

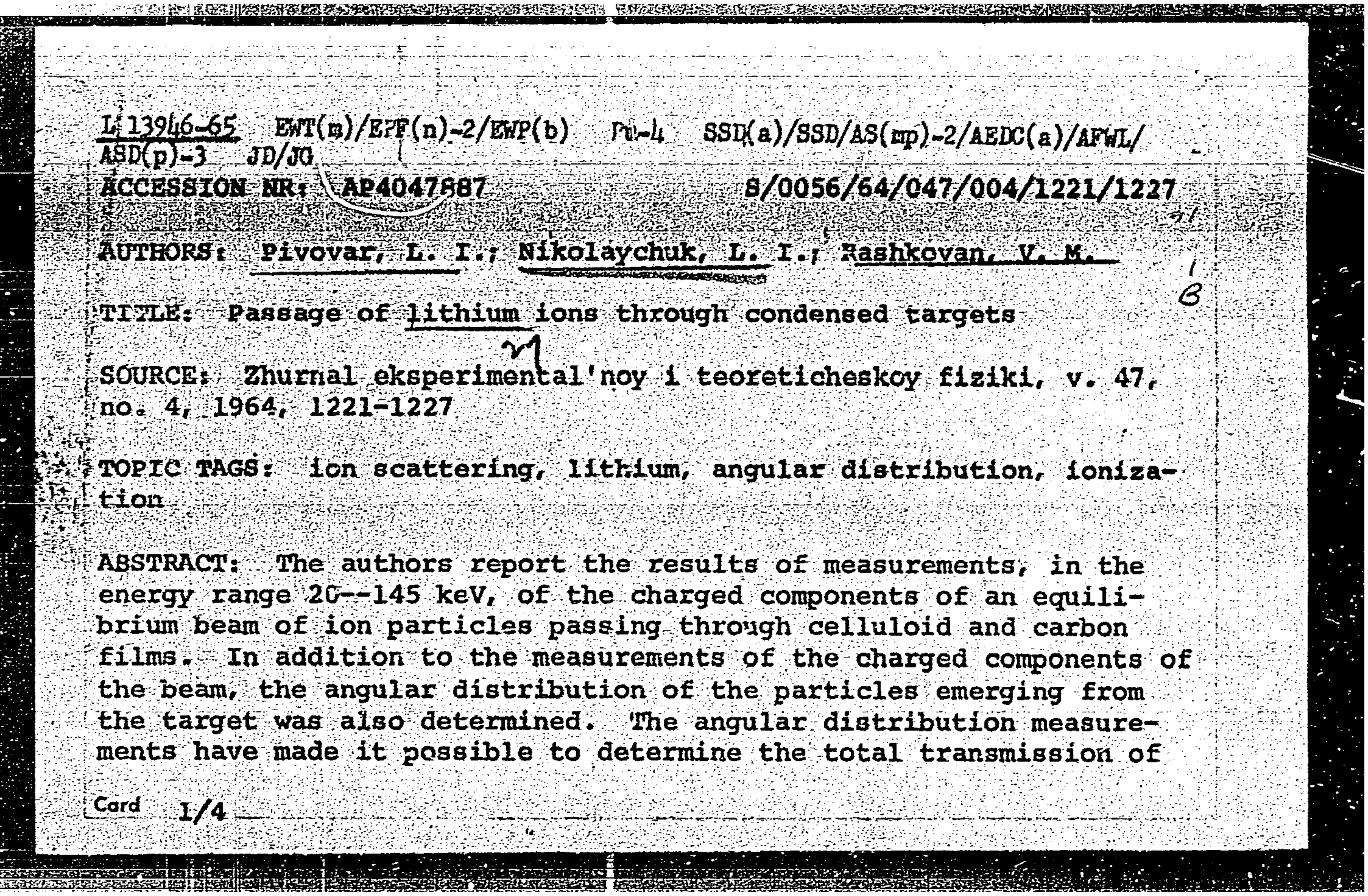
ABSTRACT : In 1955, there were started experiments on the selection of varieties and on the determination of the optimum planting density of corn under the conditions of the forest steppe of Krasnoyarskiy Kray. According to the preliminary data, it is recommended to plant for silage the fast-maturing corn variety - Minusinskaya zheltozernaya.— — G. N. Chernov

CARD: 1/1

PIVOVAR, L.I.; NIKOLAYCHUK, L.I.; VLASENKO, A.I.

Detection of heavy ions by scintillation counters. Prib. i tekh. eksp. 8 no.5:70-72 S-O '63. (MIRA 16:12)

1. Fiziko-tekhnicheskiy institut AN UkrSSR.



L 13946-65 EWT(m)/EPF(n)-2/EWP(b) Pu-4 SSD(a)/SSD/AS(mp)-2/AEDC(a)/AFWL/
ASD(p)-3 JD/JG

ACCESSION NR: AP4047587 S/0056/64/047/004/1221/1227

AUTHORS: Pivovar, L. I.; Nikolaychuk, L. I.; Rashkovan, V. M.

TITLE: Passage of lithium ions through condensed targets

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 47, no. 4, 1964, 1221-1227

TOPIC TAGS: ion scattering, lithium, angular distribution, ionization

ABSTRACT: The authors report the results of measurements, in the energy range 20--145 keV, of the charged components of an equilibrium beam of ion particles passing through celluloid and carbon films. In addition to the measurements of the charged components of the beam, the angular distribution of the particles emerging from the target was also determined. The angular distribution measurements have made it possible to determine the total transmission of

Card 1/4

L 13946-65
ACCESSION NR: AP4047887

the particle beam and to compare with the theoretical calculations the angle of the resultant deviation after multiple scattering. The specific energy losses of lithium ions passing through celluloid and carbon films were also measured. The apparatus is shown schematically in Fig. 1 of the enclosure. The counters used for the photomultiplier output were described by the authors previously (PTE No. 5, 70, 1962). The film preparation method and the test procedures are described in detail. The following plots are presented: particle distribution as a function of the electrostatic analyzer voltage, equilibrium charge fractions vs. Li^+ ion energy, degree of ionization vs. Li^+ ion velocity, specific energy loss vs. Li^+ ion velocity, and transmission of the beam vs. Li^+ ion velocity. An incidental result was that thin celluloid films are much less stable than carbon films for these experiments. "In conclusion, we thank Professor A. K. Val'ter for interest in this work." Orig. art. has: 7 figures.

L 13946-65

ACCESSION NR: AP4047887

ASSOCIATION: Fiziko-tekhnicheskiy institut Akademii nauk UkrSSR (Physicotechnical Institute, Academy of Sciences UkrSSR)

SUBMITTED: 27Apr64 ENCL: 01

SUB CODE: NP NR REF SOV: 004 OTHER: 004

Card 3/4

L 13946-65

ACCESSION NR: AP4047887

ENCLOSURE: 01

D

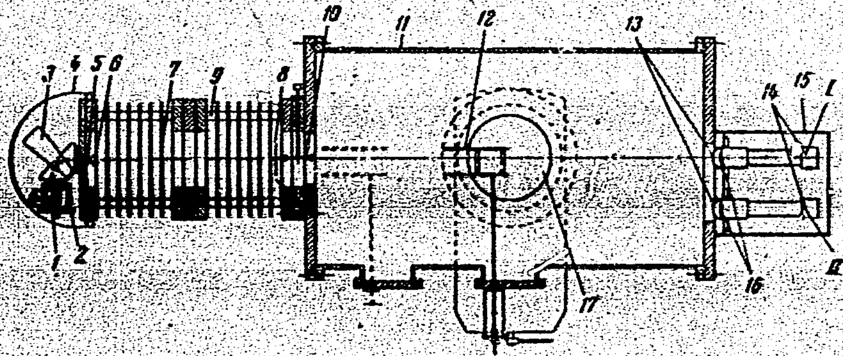


Fig. 1. Schematic diagram of setup

1 - tantalum ribbon, 2 - thermionic source, 3 - mass analyzer, 4 - high-voltage conductor, 5 - analyzer chamber, 6, 7, 8 - diaphragms, 9 - accelerating tube, 10 - drum mounting tube, 11 - drum, 12 - capacitor, 13 - reflector, 14 - FEU38 photomultiplier, 15 - case, 16 - scintillator, 17 - vacuum pump

Card 4/4

PIVOVAR, L.I.; NIKOLAYCHUK, L.I.; GUROV, V.M.

Equilibrium charge distributions of Li, Na, and K ions in Cd, Mg, and Zn vapors. Zhur.eksp.i teor.fiz. 49 no.4:1072-1076 O '65. (MIRA 18:11)

1. Fiziko-tekhnicheskiy institut AN UkrSSR.

L 11955-66 EWT(l)/EWT(m)/EPF(n)-2/EWP(t)/EWP(b)/EWA(m)-2 IJP(c) JD/WW/JG/AT

ACC NR: AP5026596 SOURCE CODE: UR/0056/65/049/004/1072/1076

AUTHORS: Pivovar, L. I.; 44,55 Nikolaychuk, L. I.; 44,55 Gurov, V. M. 44,55 8
85
B

ORG: Physicotechnical Institute, Academy of Sciences, Ukrainian SSR 44,55 (Fiziko-tekhnicheskiy institut Akademii nauk Ukrainskoy SSR)

TITLE: Equilibrium distributions of the charge of Li, Na, and K ions in Cd, Mg, and Zn Vapors 21 21 21 14

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 4, 1965, 1072-1076

TOPIC TAGS: electron loss, electron capture, charge density, lithium, sodium, potassium, ion interaction, charged particle

ABSTRACT: In view of the considerable scientific and practical interest attaching to investigations of the loss and capture of electrons 21,44,55 and ions 21 by metal vapors, the authors studied the equilibrium distributions of the charge in beams of Li, Na, and K after passage through targets consisting of cadmium, magnesium, and zinc vapors. The charge reactions were determined in the energy range 20--155 kev. The apparatus used was essentially the same as used earlier to investigate the interaction between lithium ions and condensed targets (ZhETF v. 47, 1221, 1964). The modifications of the equipment and the experimental pro-

Card 1/2

2

L 11955-66

ACC NR: AP5026596

3

cedures are described in detail. The variations of the equilibrium charged fraction on the relative ion velocity were similar for all three ions. As the atomic number of the ions increased from Li to K, a systematic decrease was observed in the relative content of the neutral particles, and a considerable increase in the fraction of the doubly charged particles. These values were not the same in zinc, magnesium, and cadmium. Final interpretation of the results is impossible without knowledge of the effective electron capture and loss cross sections. Authors thank Academician A. K. Val'ter of the Academy of Sciences UkrSSR for his interest in the investigation. Orig. art. has: 4 figures.

SUB CODE: 20/ SUBM DATE: 26May65/ NR REF SOV: 004/ OTH REF: 002

Card 2/2

MANKOV, V.S., kand. sel'khoz. nauk; NIKOLAYCHUK, [illegible].A.; [illegible], I.Ya.;
LITVINOV, Yu.M., red.

[Distribution and specialization of branches of agriculture in the Murgab and Tedzhen Oases] Razmeshchenie i spetsializatsiia otraslei sel'skogo khoziaistva v Murgabskom i Tedzhenskom oazisakh. Ashkhabad, Turkmenskoe izd-vo, 1964. 142 p. (MIRA 18:3)

1. Akademiya nauk Turkmenskoy SSR, Ashkhabad. Institut ekonomiki.

NIKOLAYCHUK, S.r.

Effect of ACTH on androgens and estrone content in the adrenals. Biokhimiia, Moskva 17 no.3:312-316 May-June 1952. (CLML 25:1)

1. Department of Histophysiology. Ukrainian Institute of Experimental Endocrinology, Khar'kov.

NIKOLAYCHUK, S.P.

Correlation between sex hormones and sympathetic impulses in the regulation of synthesis of pituitary hormones. Vop. fiziol. no.6: 158-170 '53. (MLRA 8:1)

1. Ukrainskiy institut eksperimental'noy endokrinologii.
(PITUITARY GLAND, ANTERIOR, hormones,
synthesis, eff. of testosterone & sympathetic regulation)
(TESTOSTERONE, effects,
on anterior pituitary hormone synthesis, relation to sympathetic regulation of pituitary funct.)
(SYMPATHETIC NERVOUS SYSTEM, physiology
regulation of anterior pituitary hormone synthesis, eff. of testosterone)

NIKOLAYCHUK, S. P.

A method for the determination of corticosteroids in the suprarenals and in blood. S. P. Nikolaichuk. *Biokhimiya* 19, 610-25(1954).—The method is based on the same principle of the Nelson color reaction as are other similar methods. The difference is in the method of extn. of the active principles from the cortical kidney tissue and the blood flowing through it, for the accomplishment of which a detailed description is presented. The method enables the quant. detn. of deoxycorticosterone, 17-hydroxydeoxycorticosterone, of the greater part of corticosterone, and 11-dehydrocorticosterone which heretofore could not be detd. The time required for the sepn. of 11-oxy corticosteroids from the suprarenals and from the blood is [illegible]iderably shortened by the reduction in the no. of the steps required. This also increases the accuracy in the results obtained. It is not possible by this method to sep. completely the 11-oxy corticosteroids from deoxycorticosterone because of the insufficient soly. in H_2O of corticosterone and dehydrocorticosterone. Nevertheless, a more complete picture can be obtained of the quant. content of the physiologically active corticosteroids produced by the cortex of the suprarenals.

B. S. Levine

Dept. Histophysiology, UKR. Inst. Exptl. Endocrinology

NIKOLAYCHUK, S.P.

Relationship between the androgenic activity of the adrenal cortex and the state of the brain. Sbor. nauch. trud. Ukr. nauch.-issl. inst. eksper. endok. 15:241-245 '59. (MIRA 14:11)
(ADRENOCORTICAL HORMONES) (CEREBRAL CORTEX)

NIKOLAYCHUK, S.P.

Influence of the cerebrum on the adrenocorticotropic function of the pituitary. Biul. eksp. biol. i med. 49 no. 6:26-30 Je '60. (MIRA 13:8)

1. Iz otdela gistofiziologii (zav. - zasluzhennyy deyatel' nauki prof. B.V. Aleshin) Ukrainskogo instituta eksperimental'noy endokrinologii (dir. - kandidat meditsinskikh nauk S.V. Maksimov), Khar'kov. Predstavlena deystv. chlenom AMN SSSR V.V. Parinym.

(PITUITARY BODY)
(CEREBRAL CORTEX—WOUNDS AND INJURIES)

S/219/62/053/005/002/004
1015/1215

AUTHOR: Nikolaychuk, S. P.

TITLE: Effect of mechanical injuries to the cerebral cortex on the production of ACTH by hypophysis

PERIODICAL Byulleten' eksperimental'noy biologii i meditsiny, v. 53, no. 5, 1962, 59-63

TEXT: This is a continuation of previous studies. Gauze tampons were applied subdurally to the premotor and occipital regions of the cerebral cortex of both hemispheres of female dogs. The donor animals were sacrificed by electric shock 13 and 30 days after the operation and the ACTH level in the pituitaries was determined. The extraction of ACTH from the pituitaries of the donor and intact animals was performed by a method previously described by the author (Verach. delo, no. 7, 1950, 603). The extract was tested by the G. Sayers and M Sayers method on hypophysectomized rats 24 hours after removal of the pituitaries. The ACTH content of the donor's pituitary was estimated by the changes in the androgen level in the right adrenal of hypophysectomized recipient-rats 90 min after the introduction of the extract into the peritoneal cavity. The original androgen level was determined on the left adrenal which was removed prior to the injection of the hypothesis extract. The androgens were determined by Zimmermann's color reaction. Mechanical injury of premotor and occipital areas of dogs brain brought about a marked depression in the ACTH production by the pituitary. There is 1 table.

✓

Card 1/2

Effect of mechanical injuries to

S/219/62/053/005/002/004
I015/I215

ASSOCIATION: Otdel gistofiziologii (zav. - prof. B. V. Aleshin) Ukrainskogo instituta eksperimental'noy endokrinologii (dir. - Kandidat meditsinskikh nauk S. V. Maksimov) (Division of Histophysiology [headed by Prof. B. V. Aleshin], Ukrainian Institute of Experimental Endocrinology)[directed by S. V. Maksimov, candidate in medical sciences]) Khar'kov

PRESENTED: by A. V. Lebediskiy, member of the AMS USSR

SUBMITTED: December 10, 1960

Card 2/2

LOBANOVSKAYA, L.I.; NIKOLAYCHUK, S.P.

Some data on the content of 11-hydroxycorticosteroids and 17-ketosteroids in the blood of diabetes mellitus patients. Trudy Ukr. nauch.-issl. inst. eksper. endok. 19:73-80 '64. (MIRA 18:7)

1. Iz klinicheskogo otdela Ukrainskogo instituta eksperimental'noy endokrinologii.

GENES, S.G.; NIKOLAYCHUK, S.P.

Effect of hypophysectomy and subsequent thyroidin administration on some functions of the adrenal cortex. Pat. fiziol. i eksp. terap. 9 no.5:74-76 S-O '65. (MIRA 19:1)

1. Ukrainskiy institut eksperimental'noy endokrinologii (direktor - kand. med. nauk S.V. Maksimov), Khar'kov. Submitted May 4, 1964.

NIKOLAYCHUK, V.

Leaders. Mast.ugl. 9 no.8:7-8 Ag '60. (MIRA 13:8)

1. Zaveduyushchiy promyshlennym otdelom Novovolynskogo raykoma Kommunisticheskoy Partii Ukrainy.
(Lvov-Volyn' Basin--Coal miners)

SMIRNOV, M., chlen profsoyuza rabochikh ugol'noy promyshlennosti SSSR s 1914 goda, personal'nyy pensioner; ARTAMONOV, Ya., chlen profsoyuza rabochikh ugol'noy promyshlennosti SSSR s 1917 goda, personal'nyy pensioner; MINEYEV, V., master-vzryvnik; SULIN, I., rabochiy ochistnogo zaboya, kandidat v chleny TSentral'nogo komiteta profsoyuza rabochikh ugol'noy promyshlennosti SSSR; TOLKACHEV, F.; NIKOLAYCHUK, V.

Thoughts on the regulations. Sov. shakht. 11 no.3:24-26 Mr '62. (MIRA 15:5)

1. Predsedatel' uchastkovogo komiteta profsoyuza shakhty "Ob"yedinennaya" tresta Cheremkhovugol' (for Mineyev).
2. Shakhta imeni Kirova tresta Yegorshinugol' (for Sulin).
3. Zaveduyushchiy organizatsionno-massovym otdelom Kemerovskogo oblastnogo komiteta profsoyuza rabochikh ugol'noy promyshlennosti SSSR (for Tolkachev). 4. Dorozhnyy master shakhty imeni Kalinina v Donbasse (for Nikolaychuk).
(Coal miners) (Trade unions)

BILYNSKIY, B.T. (L'vov, ul.Povitryanaya, d.68); NIKOLAYCHUK, Ya.M.

Leaflike fibroadenoma of the mammary gland. Klin.khir. no.5: 75-76 My '62. (MIRA 16:4)

1. Kafedra obshchey khirurgii (zav. - prof. A.I.Gnatyshak) L'vovskogo meditsinskogo instituta na baze L'vovskoy oblastnoy klinicheskoy bol'nitsy.

(MAMMARY GLANDS--TUMORS)

NIKOLAYENKO, A.

The October Revolution Radio Center is on duty. Radio no.2:5 F '65.
(MIRA 18:4)

NIKOLAYENKO, A.

As disclosed by the documents. Radio no.4:6-7 Ap '65.
(MIRA 18:5)

GITLIN, N., inzh. (Leningrad); NIKOLAYENKO, A., inzh. (Leningrad)

Which is the optimum regulation? Za rul. 21 no.7:15 Jl '63.
(MIRA 16:8)

1. TSentral'nyy nauchno-issledovatel'skiy institut toplivnoy apparatury.
(Motor vehicles—Fuel systems)

NIKOLAYENKO, A.A.

In the coal transportation section. Put' i put.khoz. 8 no.3:4 '64. (MIRA 17:3)

1. Zamestitel' nachal'nika distantsii, st. Novosibirsk, Zapadno-Sibirskoy dorogi.

NIKOLAYEN[illegible]

Striving for work progress. Put' i put. khoz. 8 no.8:28-29 '64.
(MIRA 17:9)

1. Zamestitel' nachal'nika Novosibirskoy distantsii puti, Zapadno-Sibirskoy dorogi.

NIKOLAYENKO, A.A.

Unloading snow from platform cars. Put' i put. khoz. 8 no.11:24 '64 (MIRA 18:2)

BABITSKIY, B.L.; VINITSKIY, L.Ye.; KAPLUNOV, Ya.N.; Prinimali uchastiye:
VELLER, V.N.; SIZIKOV, N.N.; DYUBKO, L.D.; NIKOLAYENKO, A.F.;
DROZDOVSKIY, V.F.

Dielectric properties of reclaimed rubber and its vulcanizates.
Kauch.i rez. 21 no.12:18-22 D '62. (MIRA 16:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zheleznodorozhnogo transporta.
(Rubber, Reclaimed—Electric properties)